

# Bezold-Jarisch Reflex Under Epidural Anesthesia in Emergent Cesarean Section

Uniforment Services

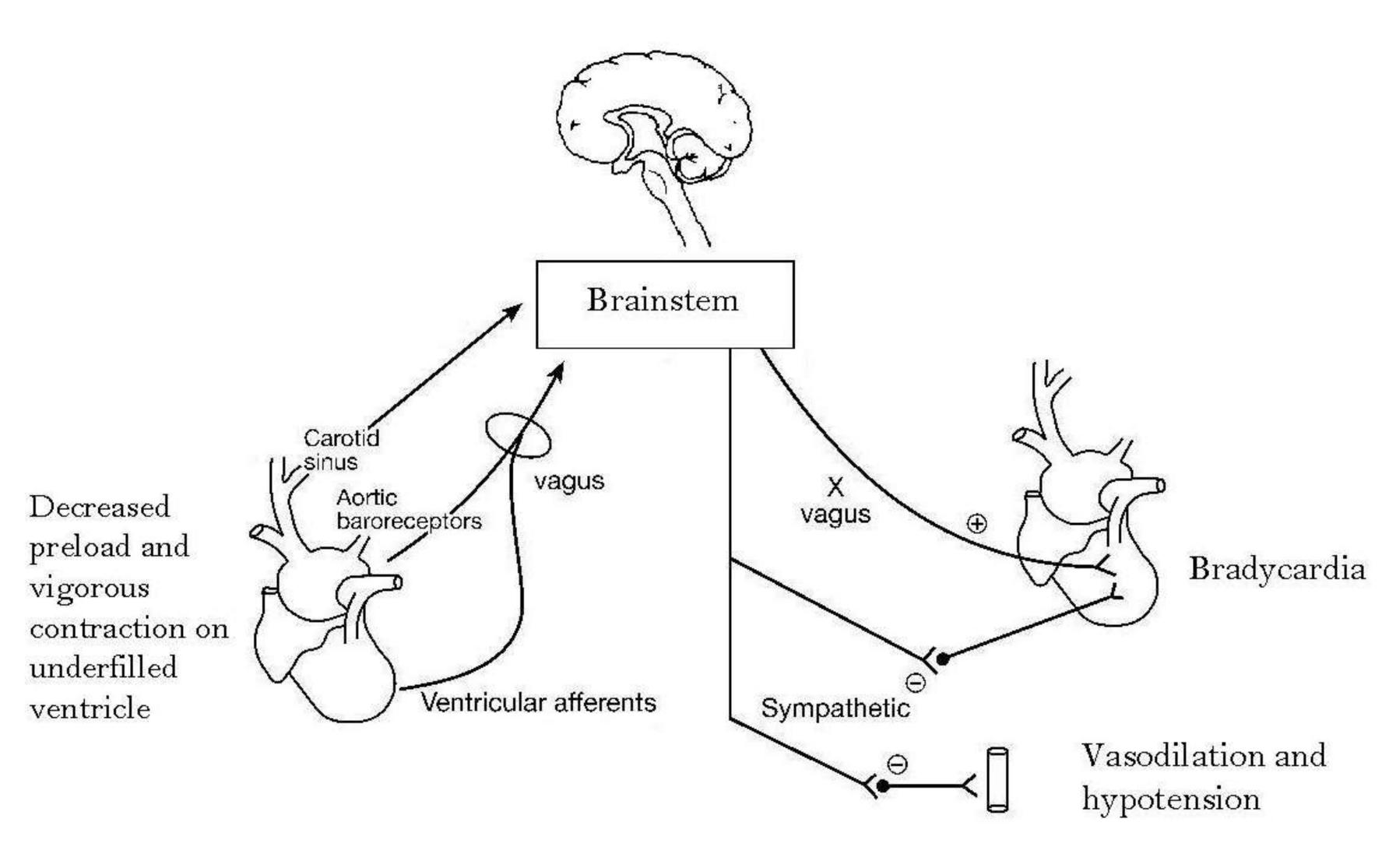
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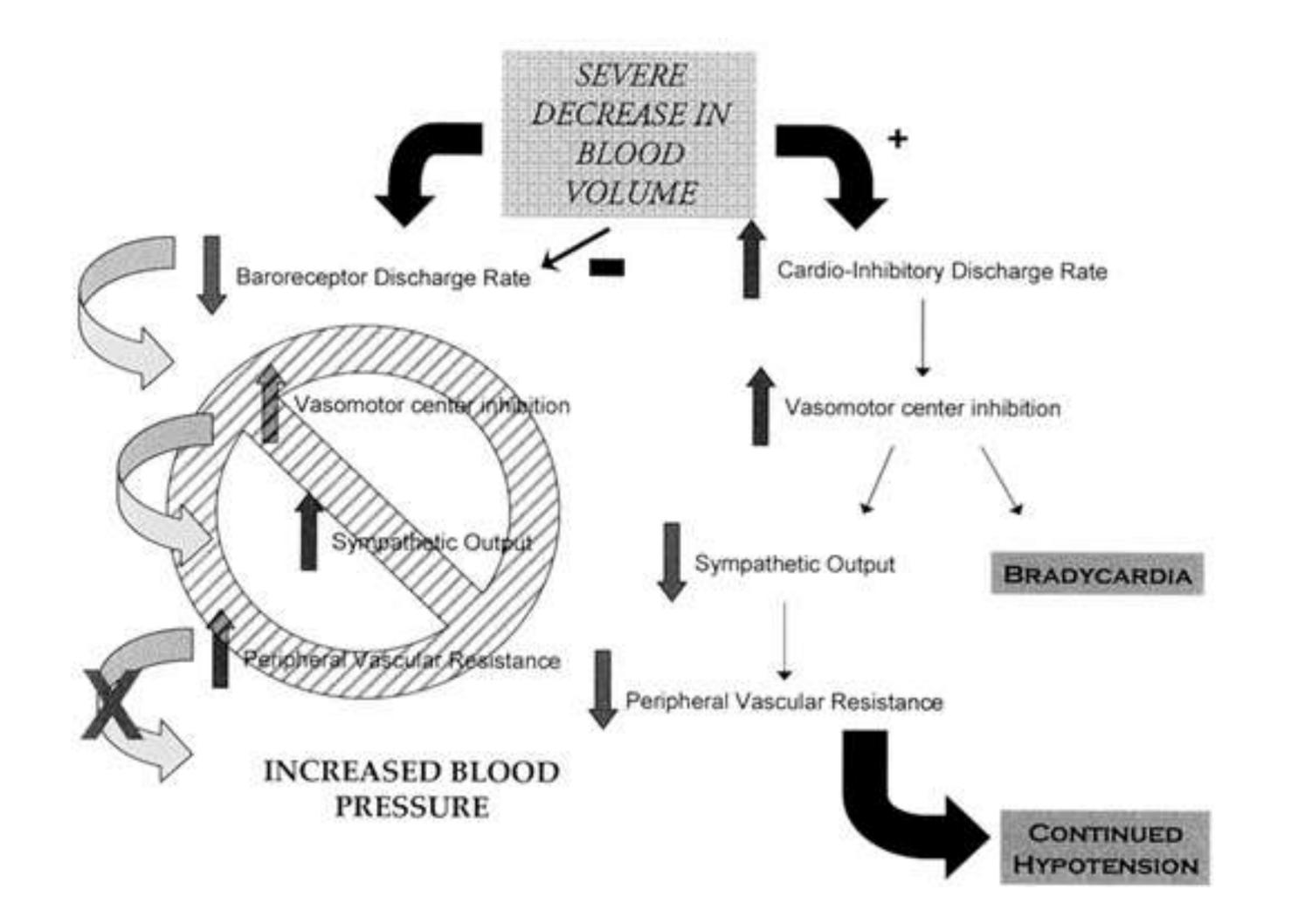
#### Introduction

A 35 year old woman presented with twin gestation for attempted vaginal delivery with epidural labor analgesia. An emergency cesarean section was required for delivery of Twin B. Rapid surgical level epidural anesthesia led to pathologic activation of the Bezold-Jarisch reflex.

## **Case Presentation**

A 35 year old female with twin gestation presented in term labor desiring vaginal delivery. Since Twin B presented breech, an early epidural was placed, and she was taken to the operating room for planned vaginal delivery. Twin A successfully delivered. Efforts to deliver Twin B resulted in prolonged fetal bradycardia, necessitating emergent cesarean section. Rapid surgical anesthesia was obtained via her existing epidural using 3% chloroprocaine, and Twin B was quickly delivered. Blood loss during the acute delivery phase was greater than 500mL. Shortly after delivery of Twin B, the patient exhibited physiology consistent with the Bezold-Jarisch reflex — nausea, unresponsiveness, bradycardia and hypotension. This responded quickly to epinephrine bolus, and the operation concluded without complication.





### Discussion

- The BJR can lead to cardiovascular collapse in cases of severe hypovolemia or in regional techniques. Discussion regarding the afferent and efferent limbs and physiology. Normally it is counteracted by the baroreceptor reflex, however as we have seen and as has been reported, the BJR can pathologically become the dominant physiologic
- Discussion regarding how the patient had a profound, rapid sympathectomy from the epidural anesthesia coupled with rapid blood loss from the emergent CS. This led to the vigorous contraction of an underfilled ventricle and the pathologic BJR response.
- This resolved with epinephrine and volume. Discussion of the proper treatment of the BJR to include epinephrine, beta blockade or anti muscarinics.

#### References:

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